

How to adapt water management to climate change in transboundary basins?

THE UNECE PLATFORM AND PILOT PROJECTS PROGRAMME

Despite uncertainties, climate change impacts are evident in many regions in the world and some of the effects are already visible. The frequency of disaster of extreme climatic events worldwide increased by 187 percent in the period 2000-2006, compared with the previous decade. Increasing floods and droughts pose a challenge to water managers around the globe. As many rivers in the world cross political boundaries, water managers in transboundary basins are faced with a double uncertainty. On the one hand they face uncertainty regarding the impacts of climate change on water resources and, on the other hand, uncertainty regarding the possible adaptation measures implemented by other riparian countries. This brings about the risk that unilateral adaptation measures, such as the construction of dams or flood protection infrastructure,

could have negative effects on neighbouring countries. Transboundary cooperation is therefore necessary to prevent negative impacts of unilateral activities and to support the coordination of adaptation measures at the river-basin level. Furthermore, combining efforts helps to find better, more cost effective solutions. The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) provides a sound framework for transboundary cooperation also in the context of adaptation to climate change.

The Convention is supporting countries in developing transboundary adaptation strategies through guidance, capacity-building, projects on the ground and exchange of experience.

The **Guidance on Water and Adaptation to Climate Change**¹, adopted by the Meeting of the Parties and published in 2009, provides step-by-step advice to decision makers and water managers on how to assess impacts of climate change on water quantity and quality, how to perform risk assessment (including health risk assessment), how to gauge vulnerability, and how to design and implement appropriate adaptation strategies. In addition, the **Guidance on Water Supply and Sanitation in Extreme Weather Events**², prepared under the Protocol on Water and Health to the Water Convention, describes the effects of climate-related weather events on the capacity and operations of water and sanitation infrastructures and services, and illustrates effective ways to minimize impacts and health risks.

GUIDANCE ALONE IS NOT ENOUGH...

The Water Convention promotes dialogue and cooperation, and supports countries in jointly adapting water management to climate change through its **programme of pilot projects on adaptation to climate change in**

transboundary basins. The projects aim to strengthen the capacity to adapt to climate change and to create positive examples demonstrating the benefits of, and possible mechanisms for, transboundary cooperation in adaptation planning and implementation. They include joint impact and vulnerability assessment and the development of a basin-wide adaptation strategy.

LEARNING FROM OTHERS IS CRUCIAL FOR EFFECTIVE ADAPTATION

Therefore, collection and exchange of experience is ensured through a **platform for sharing experience on adaptation to climate change in transboundary basins** which includes regular meetings and annual workshops as well as a web-based platform. In addition, a core group of representatives of the pilot projects has been created which meets annually and enables a direct exchange of experience between the projects.



¹ http://www.unece.org/fileadmin/DAM/env/water/publications/documents/Guidance_water_climate.pdf

² <http://www.euro.who.int/en/what-we-do/health-topics/environment-and-health/water-and-sanitation/publications/2011/guidance-on-water-supply-and-sanitation-in-extreme-weather-events>



SOME LESSONS LEARNED FROM THE PROGRAMME OF PILOT PROJECTS

- In most basins some climate change impact assessments had already been done nationally, but using different methodologies and often not specifically for a particular river basin. This underlines the importance of developing joint scenarios, modelling and vulnerability assessment in all riparian countries.
- Often, many more water and climate change related activities than expected have already been carried out in the basins. Therefore, it is important to start the project with a thorough baseline study and to establish links with the many relevant actors, such as local and national authorities, academia, NGOs, relevant business and international organizations.
- In the area of climate change and transboundary cooperation, which can be highly political, it is crucial to bring together and involve both experts (or scientists) and policy-makers from the beginning, even in the project elaboration phase, in order to ensure ownership and political support of the results achieved. This can be done through the creation of a working group with all different stakeholders represented. A relevant example of this is the Dniester pilot project where decision makers were involved in the selection of sites for flood modelling.



The climate change activities under the Water Convention are facilitated by a Task Force on Water and Climate co-chaired by the Netherlands and Germany. Most of the pilot projects are implemented in the framework of the Environment and Security Initiative (ENVSEC) together with ENVSEC members such as UNDP, UNEP and OSCE, and are supported by the International Water Assessment Centre (IWAC), the World Meteorological Organization (WMO), other international organizations and local actors.

Pilot projects on adaptation to climate change in transboundary basins



Information:

For more information please visit: http://live.unece.org/env/water/water_climate_activ.html